



February 2002

## Eastman Kodak awarded hyperspectral research contract

by Fran Crumb, Information Directorate

ROME, N.Y.— The Air Force Research Laboratory Information Directorate has awarded a \$883,840 contract to Eastman Kodak Co. of Rochester for research in the field of hyperspectral imaging.

The three-year agreement, “Hyperspectral Information Fusion,” will produce software to fuse hyperspectral information with other types of intelligence data.

Hyperspectral imagery consists of hundreds of “spectra,” or measurements of reflected or emitted energy. All objects reflect or emit a certain amount of electromagnetic energy. The intensity of this energy can be measured at various wavelengths. Many objects and substances have spectral characteristics that are unique. A unique spectral “signature” allows that object or

substance to be identified through various spectral analyses.

“By using sensors to detect multiple wavelengths, it is possible to differentiate between natural and manmade objects - even different kinds of vegetation and various types of building materials,” said Brian C. Romano, program manager in the directorate’s Information and Intelligence Exploitation Division.

“Hyperspectral imaging is a relatively new technology that has significantly improved the capability for remote sensing of the Earth’s surface,” said Romano. “In addition to potential military applications, hyperspectral technology is expected to open new frontiers in biomedical imaging and remote sensing for environmental studies.” @